

What is claimed is:

1. A structural improvement for an alert system which comprises:
 - a sensor that sends out signals to a control panel, a control panel consisting of an electronic device, a protection device and a warning device that receives signals from said sensor to protect users;
 - 5 when metal or magnetic material touching against sensor's conductive material , said sensor's conductive material would put through said control panel that starts said control panel's warning device to warn users with sounds or signals,
 - 10 and said control panel's protection device which could be an airtight chamber protects users from being hurt by metal or magnetic material.
2. The improved alert system of Claim 1, wherein said sensor is made of electroplated metal that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material, said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said warning system to warn users with sounds or signals and driving said motor to inject gas into said control panel's protection device designed as an airtight chamber to protect users from being hurt by metal or magnetic material.
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- 20 3. The improved alert system of Claim 1, wherein said sensor is made of electroplated metal that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material, said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said warning system to warn users with sounds or signals and driving said motor to pressurize liquid inside said control panel's protection device out of said protection device to protect users from being hurt by metal or magnetic material.
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- 30 4. The improved alert system of Claim 1, wherein said sensor is made of electroplated metal that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material, said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said warning system to warn users with sounds or signals and driving said motor to pressurize medicinal liquid inside said control panel's

protection device out of said protection device to provide disinfection function.

5. The improved alert system of Claim 1, wherein said sensor is a pressure sensor that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material, said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said warning system to warn users with sounds or signals and driving said motor to inject gas into said control panel's protection device designed as an airtight chamber to protect users from being hurt by metal or magnetic material.

10 6. The improved alert system of Claim 1, wherein said sensor is a pressure sensor that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material that changes pressure inside said pressure sensor; said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said control panel's warning system to warn users with sounds or signals and driving said motor to pressurize liquid inside said control panel's protection device out of said protection device to protect users from being hurt by metal or magnetic material.

15 7. The improved alert system of Claim 1, wherein said sensor is a pressure sensor that sends out a signal to said control panel's electronic circuit when detecting any metal or magnetic material that changes pressure inside said sensor; said control panel receiving signals from said sensor puts through said control panel's electronic circuit, prompting said warning system to warn users with sounds or signals and driving said motor to pressurize medicine liquid inside said control panel's protection device out of said protection device to provide disinfection function.

20 8. The improved alert system of Claim 1, wherein said control panel's warning device is a diode.

9. The improved alert system of Claim 1, wherein said control panel's warning device is a beeper.

25 10. A structural improvement for an alert system which comprises:

30 a sensor capable of detecting metal or magnetic material and sending out a signal to said control panel;
a micro-processor for receiving signals from said sensor, comparing said signals with database's data to determine security of detected materials, and

sending out signals to said control panel;

a control panel consisting of an electronic device, a protection device and a warning device to receive signals from said micro-processor for protection;

when metal or magnetic material touches against said sensor, said sensor sends out a signal to said micro-processor where a comparison between said detected result and said database is made; said micro-process detecting any metal or magnetic material sends out a signal to said control panel which prompts said warning device to warn users with sounds or signals and said protection device to protect users from being hurt by metal or magnetic material.

5 11. The improved alert system of Claim 10, wherein said sensor is a CCD image device that delivers captured image information to said micro-processor where a comparison between said image information and said database is made; said micro-processor detecting any metal or magnetic material then sends out a signal to said control panel, prompting said warning device to warn users with sounds or signals.

10 12. The improved alert system of Claim 10, wherein said sensor contains a CCD image device and a thermal sensor that delivered image information and temperature information respectively to said micro-processor where a comparison between said information and database is made to judge existence of metal or magnetic material; said micro-processor detecting any metal or magnetic material sends out a signal to said control panel, prompting said warning device in the form of a diode to warn users with sounds or signals.

15 13. The improved alert system of Claim 10, wherein said control panel's warning device is a diode.

20 14. The improved alert system of Claim 10, wherein said control panel's warning device is a beeper.

25 15. The improved alert system of Claim 10, wherein said control panel's protection device contains an airtight chamber and a motor; said control panel receiving signals from said sensor puts through said control panel's electronic circuit injects, driving said motor to inject gas into said airtight chamber to protect users from being hurt by metal or magnetic material.

30 16. The improved alert system of Claim 10, wherein said control panel's protection device contains a motor and liquid; said control panel receiving

signals from said sensor puts through said control panel's electronic circuit, driving said motor to pressurize said liquid out of said protection device to protect users from being hurt by metal or magnetic material.

17. The improved alert system of Claim 10, wherein said control panel's protection device contains a motor and medicinal liquid; said control panel receiving signals from said sensor puts through said control panel's electronic circuit, driving said motor to pressurize said medicinal liquid out of said protection device to provide disinfection function.
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18. A structural improvement for an alert system, which comprises:
10 a sensor capable of detecting metal or magnetic material and sending out signals to said control panel;
 a control panel that receives signals from said micro-processor to protect users, consisting of an electronic device, a protection device and a warning device;
19. metal or magnetic material combined with non-metal material for the convenience of detection;
15 an electromagnetic wave-proof device for isolating said sensor's detection;
 a sensor that sends out a signal to said control panel when detecting any metal or magnetic material, where said warning device is prompted to warn users
20 with sounds or signals with said metal or magnetic material placed inside said electromagnetic wave-proof device to isolate said sensor's detection.
20. The improved alert system of Claim 19, wherein said sensor is an electromagnetic wave sensor that sends out a signal to said control panel when detecting any metal or magnetic material, said electronic circuit receiving
25 signals from said sensor prompts said control panel's warning device to warn users with sounds or signals with said metal or magnetic material placed inside said electromagnetic wave-proof device to isolate said sensor's detection.
21. The improved alert system of Claim 19, wherein said electromagnetic wave-proof device is an isolation tub used to isolate detection of said sensor.
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22. The improved alert system of Claim 19, wherein said electromagnetic

wave-proof device is a pair of protection gloves for operating knives, designed for isolating said sensor's detection.

23. The improved alert system of Claim 21, wherein said metal or magnetic material is combined with non-metal material for the convenience of detection with cotton as said non-metal material.
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24. The improved alert system of Claim 21, wherein said metal or magnetic material is combined with non-metal material for the convenience of detection with swab as said non-metal material.
25. The improved alert system of Claim 21, wherein said metal or magnetic material is combined with non-metal material for the convenience of detection with suture as said non-metal material.
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26. The improved alert system of Claim 1, 10 and 18, wherein said sensor could be equipped with a capacitance sensor that shows capacitance values depending on metal or magnetic material's sharpness or distance, so as to detect metal or magnetic material's location.
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